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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

**COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO**

AS OF
MAR. 1, 1977

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN UTAH'S WASATCH RANGE.
ORC-254-10

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrieth, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS



You may have less Irrigation water this year than ever before.

SNOW COURSE MEASUREMENTS MADE ON MARCH 1, 1977 CONTINUE TO INDICATE THAT MANY AREAS WILL HAVE SEVERE TO CRITICAL WATER SHORTAGES. STUDY THE ATTACHED WATER SUPPLY FORECAST CAREFULLY FOR STREAM FLOW AND/OR RESERVOIR STORAGE FIGURES THAT CONCERN YOUR AREA. KEEP IN TOUCH WITH YOUR IRRIGATION DISTRICT OR OTHER OFFICIALS FOR ESTIMATES OF THE SUPPLY AVAILABLE FOR YOU. YOU MAY FIND YOU'LL NEED TO CHANGE CROPS, PLANTED ACREAGE, TIMING OF WATER APPLICATION OR EFFICIENCY OF YOUR WATER DISTRIBUTION SYSTEM. THESE ARE SOME OF THE EARLY DECISIONS AND PLANS YOU MAY HAVE TO MAKE:

1. Change to crops which require less water.
2. Reduce the crop acreage. Naturally, this will affect the fertilizer you order and the amount of seed you buy. Be sure unplanted land has cover crops to prevent wind erosion.
3. Check out your irrigation systems carefully. Make certain that ditches have no water-wasting weeds or debris to slow delivery; that sprinkler heads don't have leaks, pipes have tight connections and pumps work properly. If new parts or equipment are needed, purchase them soon.
4. Plant only the best land - it makes most efficient use of water. If your soil has been mapped, local Soil Conservation Service personnel can guide you. If not mapped, they can still give you general information.
5. Maintain close contact with the Soil Conservation Service or your local Conservation District for the latest water supply forecasts, and for soil information. SCS has just published water conservation TIPS pamphlets for irrigators, farmers and ranchers. Get copies.
6. Maintain close contact with the Agricultural Stabilization and Conservation Service county office. Funds for cost sharing on special water stretching practices may be made available because of the drought situation. ASCS also administers the Federal Disaster Assistance program.
7. Do the same with your closest Farmers Home Administration office. Special loans may become available.
8. Do the same with the local Cooperative Extension Service office for current information on crops, feed supply and marketing.

SCS, ASCS AND FMHA ARE LISTED IN THE PHONE BOOK UNDER "U.S. GOVERNMENT, AGRICULTURE, DEPARTMENT OF." THE EXTENSION SERVICE IS USUALLY LISTED WITH LOCAL COUNTY OFFICES.

WATER SUPPLY OUTLOOK

as of
MARCH 1, 1977



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS as of

MARCH 1, 1977

MOST OF THE MOUNTAIN AREAS OF COLORADO AND NEW MEXICO WERE HIT BY A MONTH-END STORM. THE STORM PRODUCED CONSIDERABLE SNOW IN NORTHERN AND SOUTH-CENTRAL COLORADO AND NORTHERN NEW MEXICO. DESPITE THIS STORM MOST OF THE SNOW COURSES ARE BELOW OR NEAR MINIMUM OF RECORD. THIS WILL RESULT IN MUCH BELOW NORMAL SUMMER WATER SUPPLIES. WATER CONSERVATION WILL BE THE BY-WORD THIS SUMMER. SOILS ARE DRY.



COLORADO -- SEVENTY-FIVE PERCENT OF THE SNOW COURSES IN COLORADO

ARE BELOW THE MINIMUM OF RECORD. THE MONTH-END STORM ADDED CONSIDERABLE SNOW TO THE RABBIT EARS AND LA VETA PASS AREAS. THE AREAS ARE STILL BELOW NORMAL. SUMMER STREAMFLOWS WILL BE NEAR THE MINIMUM OF RECORD UNLESS MARCH AND APRIL PROVIDE MUCH ABOVE NORMAL PRECIPITATION. SOILS ARE GENERALLY DRY. CARRYOVER STORAGE IS GOOD ON THE SOUTH PLATTE AND ITS TRIBUTARIES.



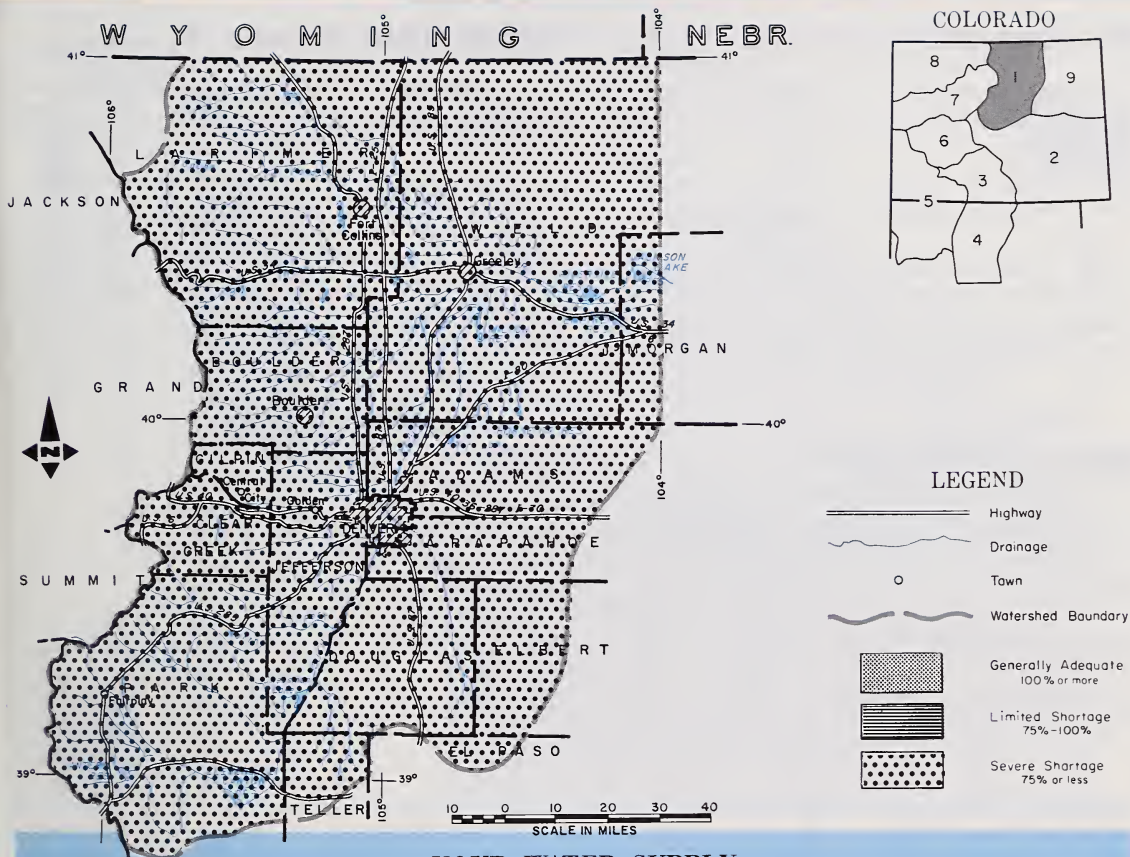
NEW MEXICO -- SUMMER STREAMFLOW IS EXPECTED TO BE NEAR RECORD

LOW THIS SUMMER EXCEPT ON THE PECOS. THE SNOWPACK ON THE PECOS WATERSHED IS NEAR NORMAL. SNOWPACK ON THE HEADWATERS OF THE RIO GRANDE IN COLORADO IS ONLY 25% OF NORMAL AND ONLY 27% OF NORMAL ON THE SAN JUAN. FLOWS FROM TRIBUTARY STREAMS IN NEW MEXICO WILL NOT IMPROVE CONDITIONS. SOILS ARE GENERALLY DRY. CONSIDERABLE SNOW WATER WILL BE REQUIRED TO FILL THE SOIL MOISTURE VOID. HEAVY MARCH SNOWFALL IS BADLY NEEDED.

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
MARCH 1, 1977

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK SITUATION HAS WORSENERD FROM LAST MONTH. THE PACK IS NOW 60% TO 70% BELOW NORMAL IN MOST DRAINAGES WITH ABOUT 80% OF THE SNOW SEASON COMPLETED. STREAMFLOW IS FORECAST TO BE NEAR MINIMUM OF RECORD IF AVERAGE PRECIPITATION IS RECEIVED THE REMAINDER OF THE SEASON. SOILS REMAIN DRY. RESERVOIR STORAGE IS NEAR AVERAGE.

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STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORECAST	% of Average	Average*
Big Thompson River at Drake (1)	46	41	107
Boulder Creek at Orodell	25	50	49
Cache La Poudre River at Canyon Mouth (2)	118	48	247
Clear Creek at Golden (3)	51	40	127
St. Vrain Creek at Lyons (4)	30	40	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Poor	Poor
Coal Creek	Poor	Poor
North Fork of South Platte	Poor	Poor
North Fork of Cache La Poudre	Poor	Poor
Ralston Creek	Poor	Poor
Rock Creek	Poor	Poor

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Antero	33	15	16	14
Barr Lake	32	29	26	23
Black Hollow	8	4	5	4
Boyd Lake	44	34	39	37
Cache La Poudre	10	0	6	8
Carter Lake	109	79	92	87
Chambers Lake	9	2	2	3
Cheesman	79	30	46	57
Cobb Lake	34	5	15	15
Eleven Mile	98	90	97	87
Fossil Creek	12	7	6	7
Gross	43	23	19	29
Halligan	6	2	5	4
Horsetooth	144	79	111	97
Lake Loveland	14	8	9	9
Lone Tree	9	3	5	7
Mariano	5	5	5	5
Marshall	10	4	5	4
Marston	18	16	15	15
Milton	24	16	16	13
Standley	42	28	31	17
Terry	8	6	6	5
Union	13	13	11	10
Windsor	19	9	13	10

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average*
Big Thompson	5	24	24
Boulder	3	55	39
Cache La Poudre	7	34	32
Clear Creek	6	73	60
Saint Vrain	3	35	29
South Platte	2	42	42

* 1958-1972 period.

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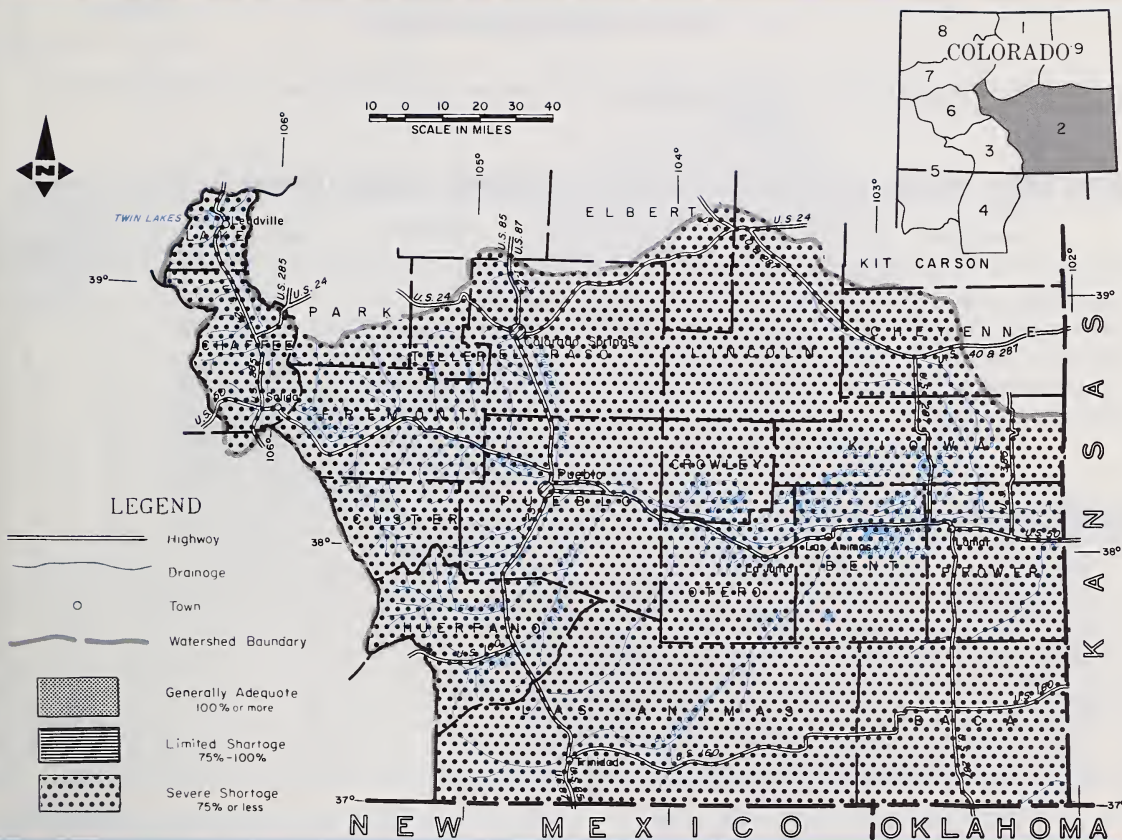


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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of
MARCH 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE ARKANSAS AND ITS SOUTHERN TRIBUTARIES WAS IMPROVED SLIGHTLY BY THE MONTH-END STORM, HOWEVER, THE SNOWPACK IS STILL BELOW NORMAL. THE ARKANSAS BASIN IS ESPECIALLY SHORT OF SNOW. STREAMFLOW FORECASTS WILL BE NEAR 50% OF NORMAL ON THE ARKANSAS BUT UP TO 70% ON SOUTHERN TRIBUTARIES. SOILS ARE DRY. STORAGE POOR. WATER WILL BE VERY SHORT UNLESS THE NEXT TWO MONTHS PRODUCE MUCH ABOVE AVERAGE SNOW.

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STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	139	48	290
Arkansas River at Salida (1)	155	49	313
Cucharas River near La Veta	8	80	10
Huerfano River near Redwing	8	53	15
Purgatoire River at Trinidad	21	55	38

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa River	Fair	Poor
Fountain Creek	Poor	Poor
Grape Creek	Poor	Poor
Hardscrabble Creek	Poor	Poor
Monument Creek	Poor	Poor

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Adobe	62	0	0	17
Clear Creek	11	6	5	8
Cucharas	40	-	0	3
Great Plains	150	0	0	59
Horse Creek	27	11	12	7
John Martin	354	20	9	90
Meredith	42	0	0	13
Model	15	0	0	4
Turquoise	121	31	50	--
Twin Lakes	58	7	17	26

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Arkansas	10	46	46
Cucharas	1	105	88
Purgatoire	1	72	71

* 1958-1972 period.

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"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO

as of
MARCH 1, 1977

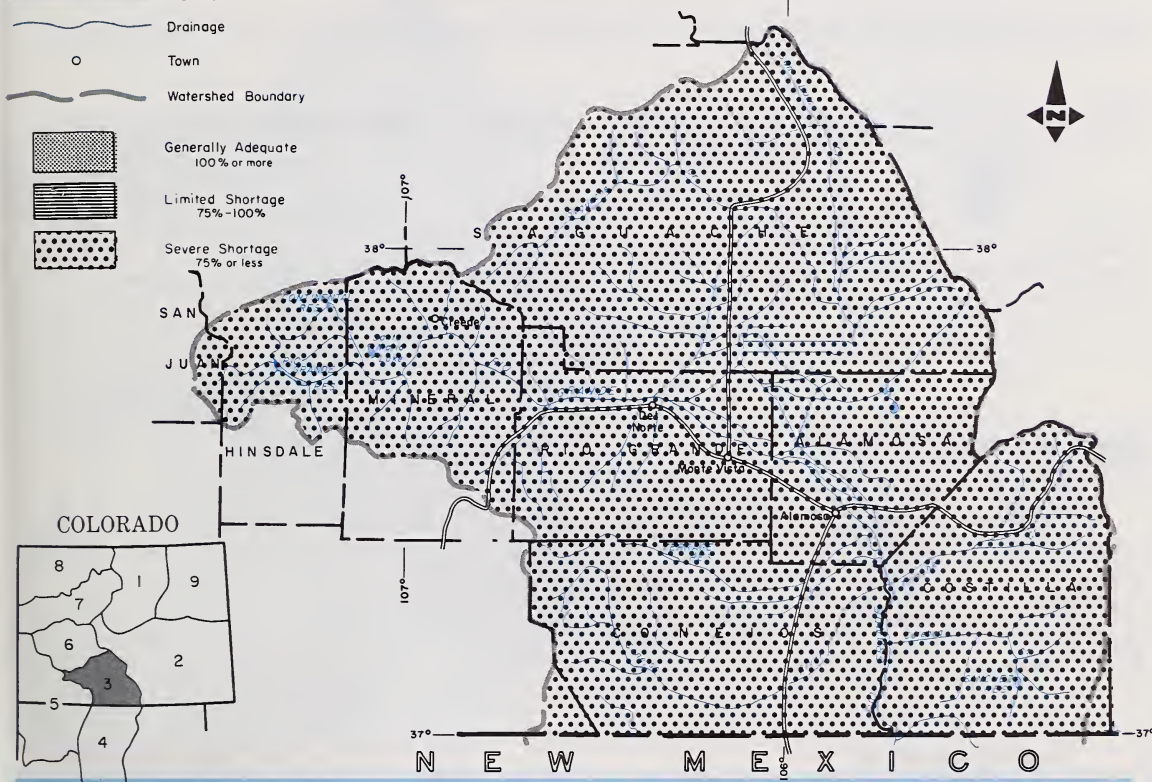
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CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary

10 0 10 20 30 40
SCALE IN MILES

- Generally Adequate
100% or more
- Limited Shortage
75%-100%
- Severe Shortage
75% or less



YOUR WATER SUPPLY

THE SNOWPACK ON THE RIO GRANDE DRAINAGE IS ONE OF THE LOWEST OF RECORD. THE CULEBRA DRAINAGE RECEIVED ADDITIONAL SNOW DURING THE MONTH-END STORM AND IS IN SURPRISINGLY GOOD SHAPE. AREAS ALONG THE SANGRE DE CRISTO MOUNTAINS HAS BY FAR THE BEST SNOW IN COLORADO. UNFORTUNATELY IT PRODUCES ONLY LIMITED WATER. CARRYOVER STORAGE IS POOR AND VALLEY SOILS ARE DRY. SUMMER STREAM-FLOW ON THE RIO GRANDE AND TRIBUTARIES WILL BE ONLY ABOUT HALF OF NORMAL.

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U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	31	50	62
Conejos River near Mogote (1)	90	49	184
Culebra Creek at San Luis (2)	10	59	17
Rio Grande at 30 Mile Bridge (3)	77	64	121
Rio Grande near Del Norte (3)	250	54	467
South Fork of Rio Grande at South Fork	63	55	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Fair	Poor
Sangre de Cristo Cr.	Avg.	Poor
Trinchera Creek	Avg.	Poor

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Continental	27	2	5	5
Platoro	60	—	—	9
Rio Grande	46	3	17	17
Sanchez	103	4	—	13
Santa Maria	45	7	9	6
Terrace	18	4	9	6

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Alamosa	—	—	—
Conejos	2	31	33
Culebra	2	82	70
Rio Grande	10	22	25

* 1958-1972 period.

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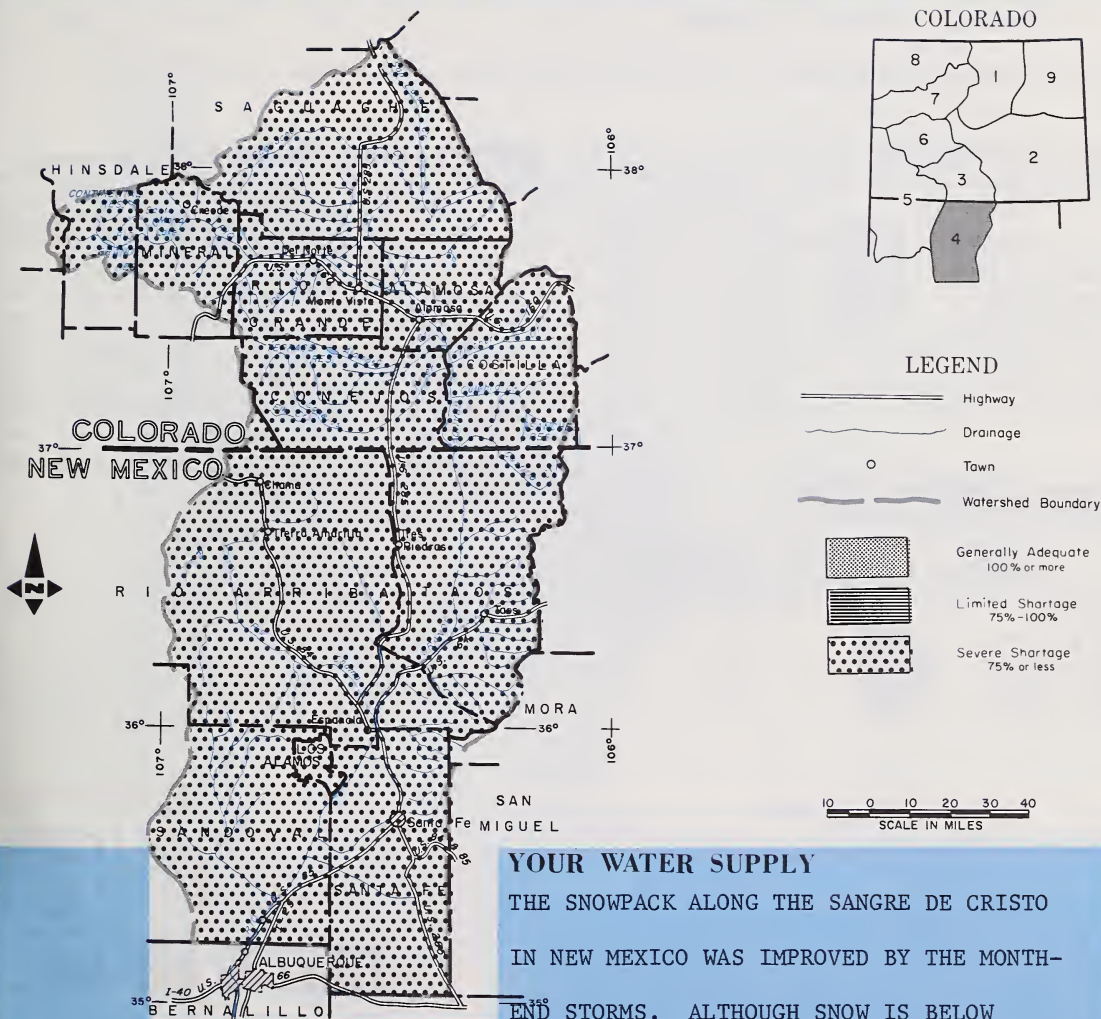


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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of
MARCH 1, 1977

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



NORMAL IT IS MUCH BETTER THAN THE SNOWPACK ON THE SAN JUANS TO THE WEST. SUMMER FLOW WILL BE BELOW NORMAL ON ALL STREAMS IN NEW MEXICO WITH THE POSSIBLE EXCEPTION OF THE PECOS. SOILS ARE DRY.

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U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORECAST	% of Average	Average *
Costilla Creek at Costilla (1)	12	63	19
Jemez River near Jemez	18	62	29
Pecos River at Pecos	34	83	41
Red River at Mouth near Questa	20	69	29
Rio Chama at El Vado	73	38	190
Rio Grande at Otowi (2)	210	40	526
Rio Grande at San Marcial (2)	145	41	355
Rio Hondo near Valdez	6	43	14
Santa Cruz River at Cundiyo	7	54	12

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Fair	Poor
Mora River	Fair	Poor
Nambe Creek	Fair	Poor
Rio Ojo Caliente	Fair	Poor
Rio Pueblo de Taos	Fair	Poor
Santa Fe, Creek	Fair	Poor

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Avalon	5	4	3	--
Caballo	344	142	45	87
Conchas	273	84	84	186
El Vado	195	110	126	3
Elephant Butte	2195	343	716	439
McMillan	34	4	6	--
Sumner	111	26	37	79

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Pecos	1	135	106
Red River	2	35	56
Rio Chama	3	27	34
Rio Grande, NM	8	58	62
Rio Hondo	--	--	--

* 1958-1972 period.

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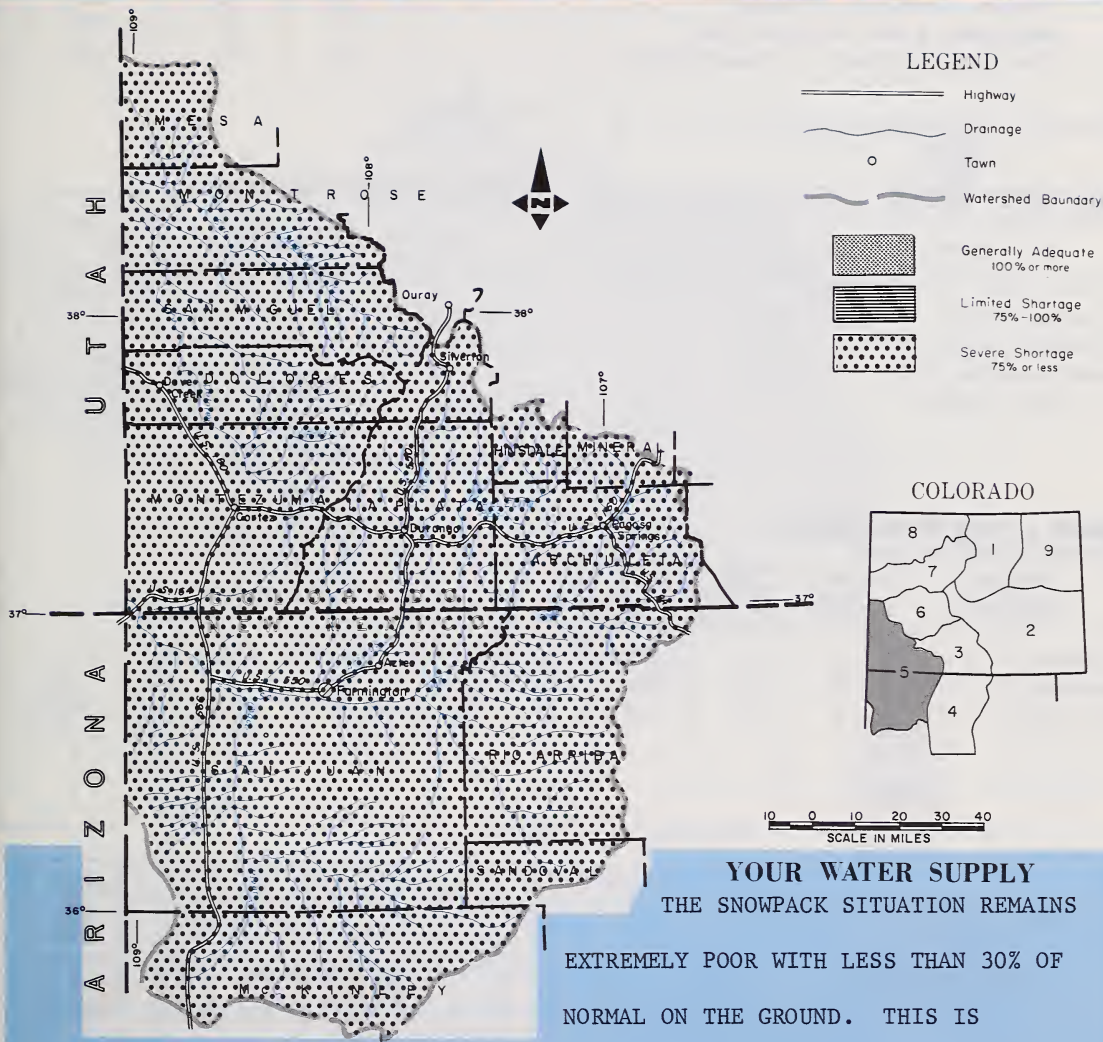


FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
MARCH 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



PARTICULARLY BAD NEWS SINCE 85% OF THE WINTER IS BEHIND US. STREAMFLOW IS
FORECASTED TO BE NEAR MINIMUM OF RECORD ON ALL STREAMS. WATER SHORTAGES
ARE EMINENT. SOILS REMAIN DRY.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
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Issued by

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D. W. GILLASPE—AREA CONSERVATIONIST
ALAMOSA, COLORADO
JAMES E. TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORECAST	% of Average	Average *
Animas River at Durango	235	56	423
Dolores River at Dolores	100	43	232
La Plata River at Hesperus	9	38	24
Los Pinos River at Bayfield (1)	100	50	198
Mancos River near Towac (3)	5	36	14
Inflow to Navajo River (1 & 2)	233	39	597
Piedra Creek at Arboles	70	38	185
San Juan River at Carracas	138	39	354
San Miguel River at Placerville	80	62	130

(1) Observed flow plus change in storage in Vallecito Reservoir. (2) April—July (3) March—July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Poor	Poor
Hermosa Creek	Poor	Poor
West Dolores River	Poor	Poor
Williams Creek	Poor	Poor

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Groundhog	22	7	9	9
Jackson Gulch	10	4	6	4
Lemon	40	17	19	19
Navajo	1036	1120	1100	1203*
Vallecito	126	47	55	54

*Less than 15 yrs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	21	25
Dolores	4	26	28
San Juan	5	22	27

* 1958-1972 period.

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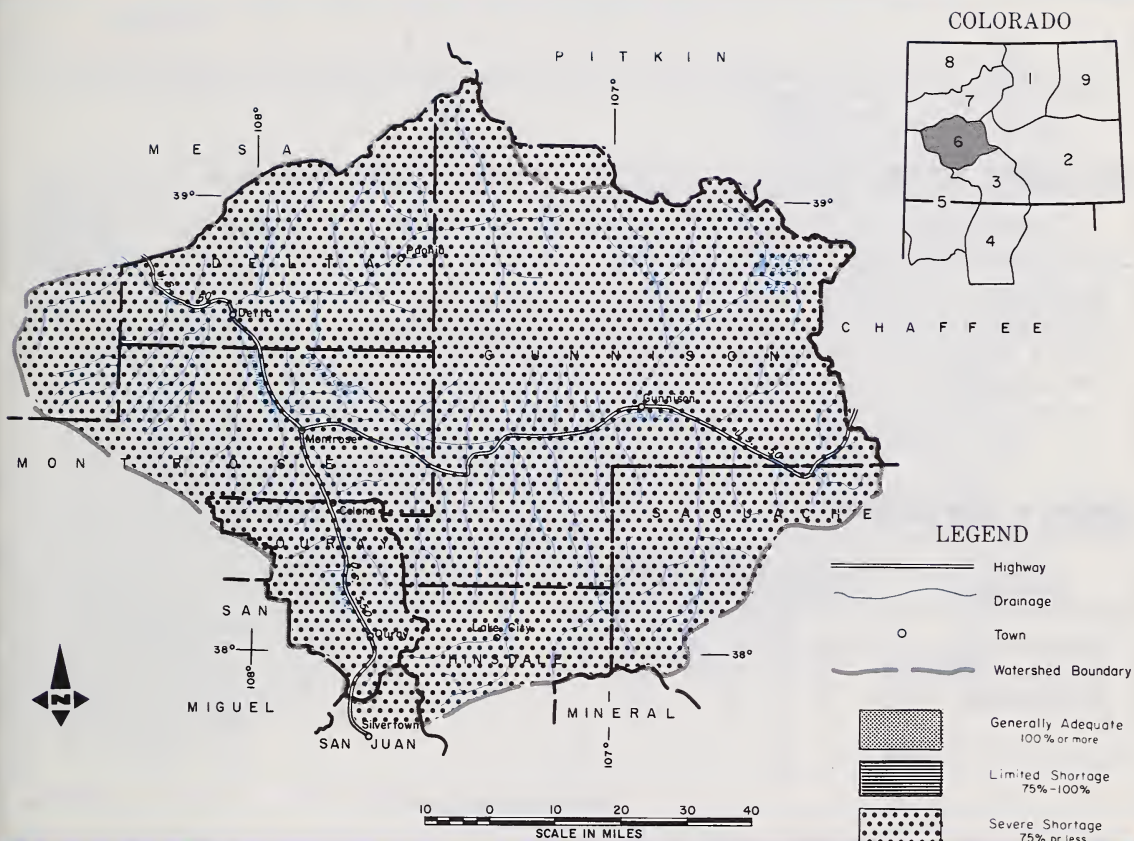


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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO

as of
MARCH 1, 1977

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STORMS LATE IN FEBRUARY BROUGHT ONLY MARGINAL IMPROVEMENT IN THE MOUNTAIN SNOWPACK. IT REMAINS 60 to 70% BELOW NORMAL WITH OVER 80% OF THE SNOW SEASON BEHIND US. MANY SNOW COURSES WERE MINIMUM OF RECORD. STREAMFLOW WILL LIKELY BE LESS THAN HALF OF NORMAL IF AVERAGE PRECIPITATION IS RECEIVED FROM NOW ON. SLIGHTLY ABOVE AVERAGE RESERVOIR STORAGE WILL HELP REDUCE THE IMPACT OF EXPECTED WATER SHORTAGES THIS SUMMER.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
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DENVER, COLORADO

Issued by

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GRAND JUNCTION, COLORADO
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STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	347	44	792
Gunnison River near Grand Junction (2)	500	42	1184
North Fork of Gunnison (3)	120	46	263
Surface Creek near Cedaredge	10	63	16
Uncompahgre River at Colona	59	44	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs.
(3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Poor	Poor
Slate River	Poor	Poor
Taylor River	Poor	Poor
Tomichi Creek	Poor	Poor

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Blue Mesa	830	394	440	354
Morrow Point	121	115	115	109
Taylor	106	57	62	65

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	12	35	35
Surface Creek	3	23	31
Uncompahgre	3	35	39

* 1958-1972 period.

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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO

as of
MARCH 1, 1977

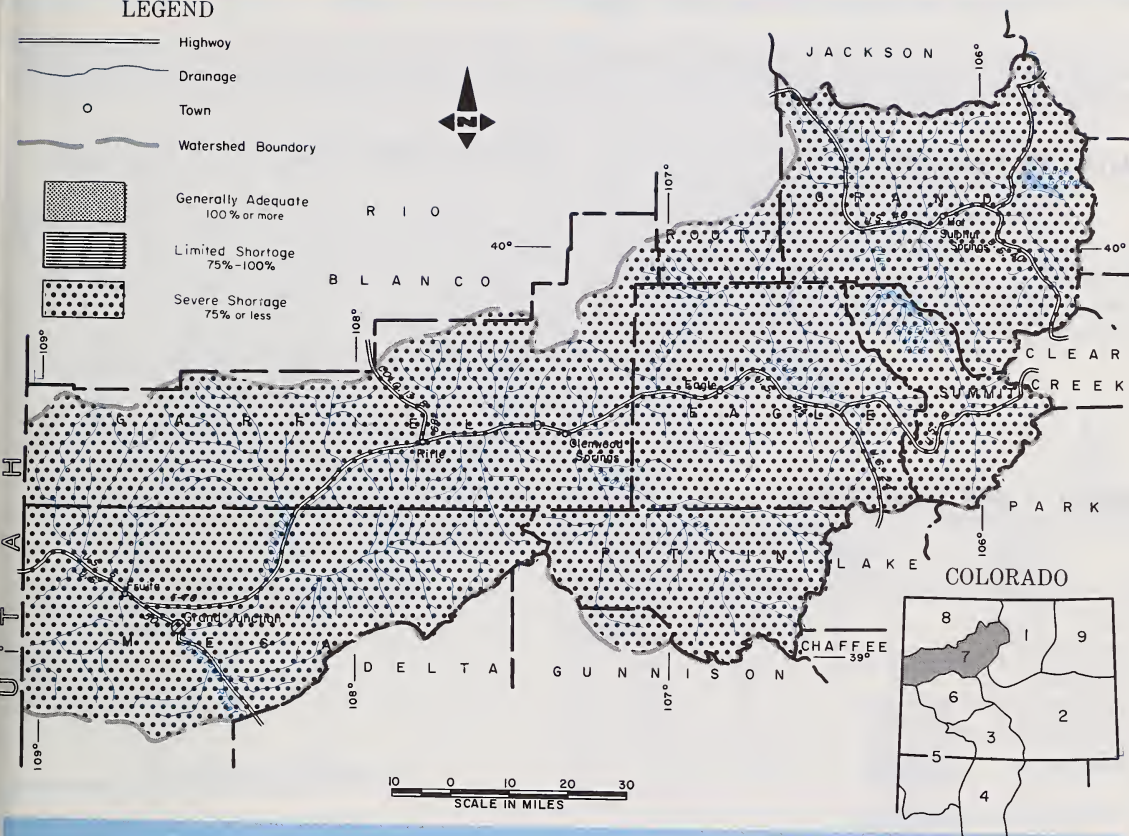
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LEGEND

-  Highway
-  Drainage
-  Town
-  Watershed Boundary



- Generally Adequate
100% or more
- Limited Shortage
75%-100%
- Severe Shortage
75% or less



YOUR WATER SUPPLY

THE SNOWPACK REMAINS ABOUT 60% BELOW NORMAL. STORMS LATE IN FEBRUARY BROUGHT LITTLE IMPROVEMENT IN THE HIGH COUNTRY. MOST SNOW COURSE MEASUREMENTS WERE THE MINIMUM OF RECORD. APPROXIMATELY 80% OF THE WINTER IS GONE. STREAMFLOW IS PROJECTED TO BE NEAR HALF OF NORMAL IF AVERAGE PRECIPITATION IS RECEIVED THE REMAINDER OF THE SEASON. SOILS REMAIN DRY. CARRYOVER RESERVOIR STORAGE IS GOOD AND WILL HELP TO SOME EXTENT ALLEVIATE EXPECTED WATER SHORTAGES.

This report prepared by

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Issued by

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GRAND JUNCTION, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORECAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	92	54	169
Blue River inflow to Green Mountain Reservoir (1)	130	54	297
Colorado River near Cameo (6)	1140	48	2370
Colorado River near Dotsero (3)	675	47	1434
Colorado River inflow to Granby Reservoir (2)	116	51	228
Roaring Fork at Glenwood Springs (4)	375	53	713
Williams Fork near Parshall (5)	25	40	63
Willow Creek inflow to Willow Creek Reservoir	20	40	47

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Fair	Poor
Eagle River	Fair	Poor
Gypsum Creek	Fair	Poor

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Dillon	254	210	226	233
Granby	466	191	299	235
Green Mountain	139	71	76	67
Homestake	43	23	0	17
Ruedi	101	68	61	65
Vega	32	6	13	11
Williams Fork	97	48	48	29
Willow Creek	9	6	7	7

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	8	47	45
Colorado	17	43	40
Plateau	3	28	29
Roaring Fork	7	37	38
Williams Fork	3	54	49
Willow	2	33	34

* 1958-1972 period.

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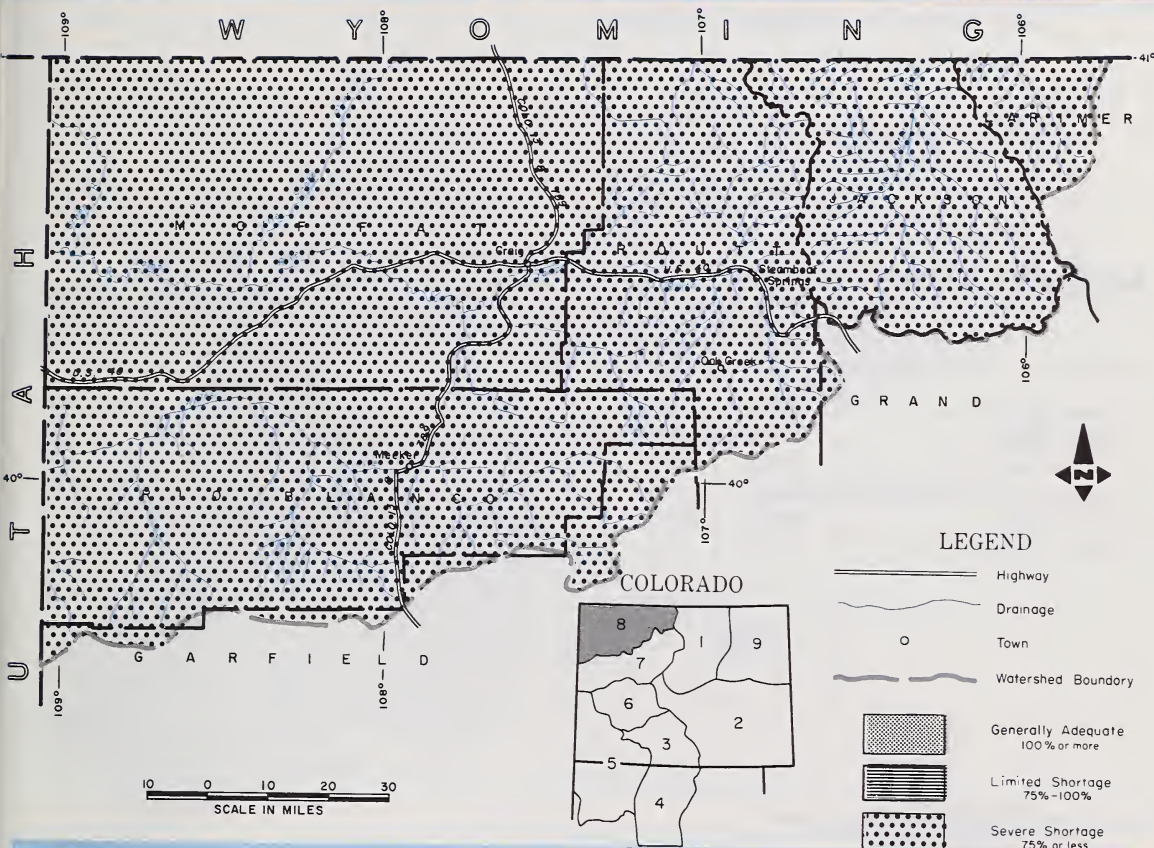


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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
MARCH 1, 1977

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STORMS LATE IN FEBRUARY BROUGHT ONLY MINOR IMPROVEMENT IN THE SNOWPACK. THE SNOWPACK REMAINS ONE-THIRD TO ONE-HALF OF NORMAL WITH ABOUT 85% OF THE SNOW SEASON COMPLETED. STREAMFLOW FORECASTS PROJECT NEAR MINIMUM OF RECORD FLOWS FOR ALL STREAMS ASSUMING NORMAL PRECIPITATION IS RECEIVED THE REMAINDER OF THE SEASON. SOILS REMAIN RELATIVELY DRY.

This report prepared by

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U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORECAST	% of Average	Average *
Elk River at Clark	120	61	198
Laramie River near Woods	47	37	127
Little Snake River at Lily	133	41	324
North Platte River at Northgate	95	40	240
White River near Meeker	155	52	295
Yampa River near Maybell	450	50	905
Yampa River at Steamboat Springs	123	45	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Fair	Poor
Hunt Creek	Fair	Poor
Illinois River	Fair	Poor
Michigan River	Fair	Poor
Oak Creek	Fair	Poor
Trout Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	2	50	47
Laramie	2	37	36
North Platte	4	48	46
White	2	38	33
Yampa	5	56	46

* 1958-1972 period.

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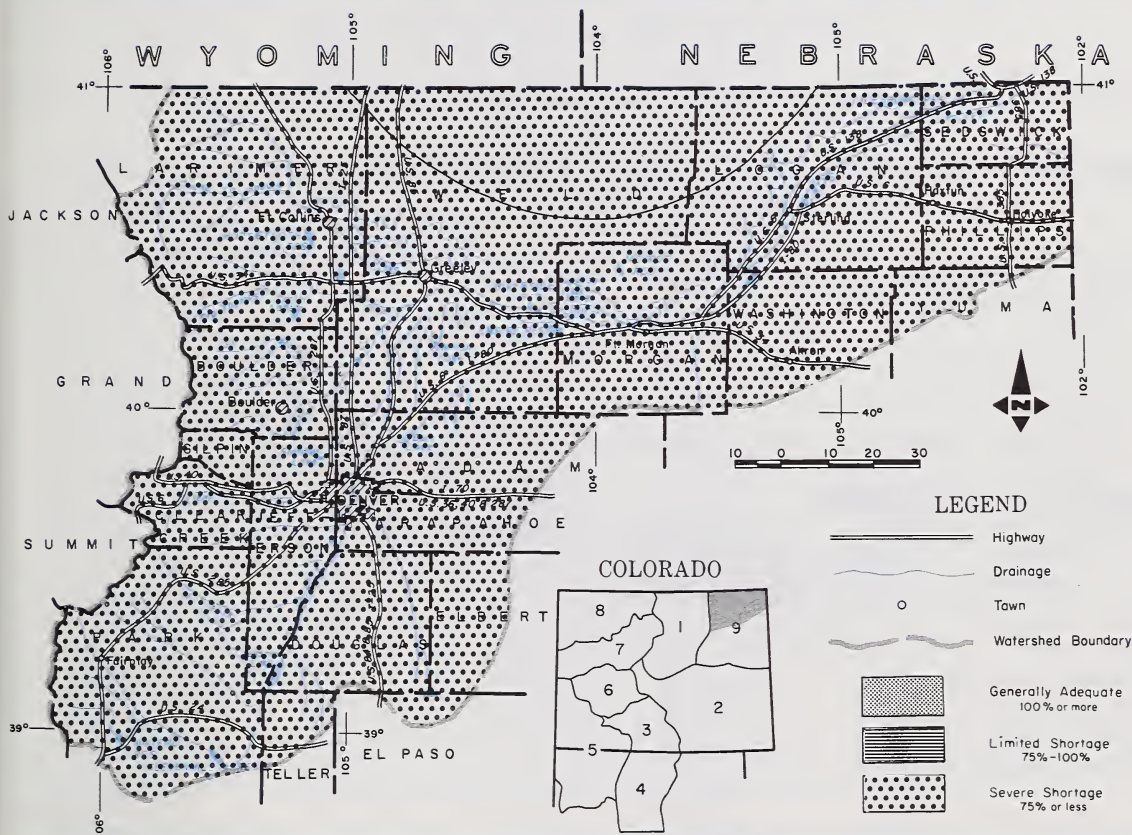


FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
MARCH 1, 1977

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE SOUTH PLATTE AND ITS NORTHERN TRIBUTARIES IS EXTREMELY SHORT. A NUMBER OF SNOW MEASUREMENTS INDICATE A MINIMUM OF RECORD. SUMMER FLOWS WILL ALSO BE VERY SHORT ESPECIALLY MIDDLE AND LATE SEASON. FORECASTS ARE GENERALLY FOR LESS THAN HALF OF NORMAL FLOWS. SOIL MOISTURE IN MOUNTAINS AND PLAINS IS POOR. CARRYOVER STORAGE IS GOOD AND WILL BE AN EXCELLENT SUPPLEMENTAL SUPPLY.

This report prepared by

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STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	46	41	107
Boulder Creek at Orodell	25	50	49
Cache La Poudre River at Canyon Mouth (2)	118	48	247
Clear Creek at Golden (3)	51	40	127
Saint Vrain Creek at Lyons (4)	30	40	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Poor	Poor
South Platte from Fort Morgan to Sterling	Poor	Poor
South Platte below Sterling	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average*
Big Thompson	5	24	24
Boulder	3	55	39
Cache La Poudre	7	34	32
Clear Creek	6	73	60
Saint Vrain	3	35	29
South Platte	2	42	42

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Carter	109	79	92	87
Cheesman	79	30	46	57
Eleven Mile	98	90	97	87
Empire	38	31	32	30
Horsetooth	144	79	111	97
Jackson	35	32	29	32
Julesburg	28	21	20	20
Point of Rocks	70	62	70	59
Prewitt	33	27	25	18
Riverside	58	42	46	53

* 1958-1972 period.

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"The Conservation of Water begins with the Snow Survey"

APPENDIX I

SNOW COURSE MEASUREMENTS as of MARCH 1, 1977

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/24	21	3.9	11.1	14.1
McIntyre	NS			---	---
Roach	2/25	31	6.5	17.1	14.9
North Platte River					
Cameron Pass	2/25	39	10.9	22.6	22.5
Columbine Lodge	2/28	53	10.9	17.8	20.4
Northgate	2/25	13	2.1	4.7	5.5
Park View	2/24	16	2.5	7.8	7.8
Willow Cr. Pass (B)	2/28	21	3.8	10.3	10.4
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/25	15	3.6	3.7	6.2
Boulder Falls	2/24	22	3.8	7.3	10.3
University Camp	2/24	27	4.9	11.4	15.1
Big Thompson River					
Deer Ridge	2/28	2	0.1	3.0	4.0
Hidden Valley	2/28	15	2.1	10.1	8.1
Lake Irene (B)	2/23	32	5.8	17.2	19.0
Long's Peak	2/24	9	1.8	8.8	8.5
Two Mile	2/28	16	2.4	11.0	11.9
Cache La Poudre					
Bennett Creek	2/25	7	1.1	5.6	---
Big South	2/25	6	0.7	0.2	2.3
Cameron Pass	2/25	39	10.9	22.6	22.5
Chambers Lake	2/25	8	1.0	8.7	8.1
Deadman Hill	2/24	21	3.9	11.1	14.1
Hourglass Lake	2/25	8	1.4	5.8	5.3
Joe Wright	2/25	50	11.6	18.7	---
Lost Lake	2/28	18	3.0	10.0	10.2
Red Feather	2/24	6	0.9	5.5	5.4
Clear Creek					
Baltimore (B)	2/25	15	3.6	3.7	6.2
Berthoud Falls	2/25	24	6.0	9.3	11.6
Empire	2/25	15	3.4	5.6	6.0
Grizzly Peak (B)	2/25	35	8.7	12.7	14.6
Loveland Lift	2/25	42	11.7	12.9	16.9
Loveland Pass	2/25	30	7.4	11.9	12.7
St. Vrain River					
Copeland Lake	2/25	8	0.9	3.0	3.8
Ward	2/28	11	2.0	3.8	4.8
Wild Basin	2/25	15	2.4	8.3	9.9
South Platte River					
Como	2/28	8	1.5	5.7	---
Geneva Park	3/01	3	0.5	4.1	3.3
Horseshoe Mt.	2/23	20	3.2	8.1	---
Hoosier Pass	2/24	21	4.7	10.2	10.6
Jefferson Creek	2/24	16	2.9	8.1	7.6
Mosquito	2/28	19	3.8	8.5	---
Trout Creek Pass	2/23	6	1.1	3.8	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/28	32	6.2	5.8	5.1
Cooper Hill (B)	2/28	26	3.1	10.2	9.0
East Fork	2/25	21	3.5	9.4	8.0
Four Mile Park	3/01	11	1.8	5.3	5.1
Fremont Pass	2/25	31	6.2	14.4	12.9
Garfield	2/28	24	4.2	8.4	11.3
Hermit Lake	2/24	15	3.2	7.0	---
Monarch Pass	2/28	30	6.5	11.6	14.0
Tennessee Pass	3/01	22	3.1	8.7	8.7
Twin Lakes Tunnel	2/27	17	2.5	8.4	8.9
Westcliffe	2/24	19	3.8	7.0	6.0
Cucharas River					
Apishapa	2/24	17	4.5	5.9	---
Cucharas Creek	2/24	23	5.4	6.8	---
La Veta Pass (B)	2/28	32	6.3	6.0	7.2
Purgatoire River					
Bourbon	2/28	29	4.2	5.8	5.9
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	2/24	3	0.3	7.9	5.1
Summitville	Discontinued			17.6	14.7
Conejos River					
Cumbres	2/24	22	5.7	16.5	16.5
La Manga	2/24	26	4.0	16.9	---
Platoro	2/27	20	4.2	15.7	13.9
River Springs	NS	---	---	4.9	5.0
Culebra River					
Brown Cabin	2/24	12	2.6	3.1	---
Cottonwood (B)	2/24	9	2.1	---	---
Culebra	2/23	20	3.9	6.5	7.4
La Veta Pass (B)	2/28	32	6.3	6.0	7.2
Trinchera (B)	2/25	23	4.0	7.0	---
Rio Grande					
Cochetopa Pass	2/23	8	1.6	4.9	4.8
Grayback	2/28	18	3.1	14.9	---
Hiway	2/24	21	4.2	23.4	19.5
Lake Humphrey	2/23	11	1.7	8.5	6.1
Love Lake	2/23	10	0.9	10.2	---
Pass Creek	2/24	14	2.3	13.4	9.9
Pool Table	2/23	11	0.9	4.8	6.0
Porcupine	2/28	12	2.5	9.4	9.1
Santa Maria	2/28	6	1.2	4.2	4.1
Upper Rio Grande	2/28	11	2.1	7.4	7.6
Wolf Creek Pass	2/24	28	5.8	26.6	22.0
Wolf Cr. Summit (B)	2/24	24	5.2	25.0	22.5
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	2/24	10	3.5	2.6	3.3
Rio Chama					
Bateman	2/23	20	3.5	9.9	9.3
Chama Divide	2/23	3	0.6	5.3	3.0
Chamita	2/25	18	2.6	9.2	7.3
Rio Grande					
Alamitos	2/25	23	3.8	6.8	---
Big Tesuque	2/28	16	3.2	5.2	4.9
Cordova	2/28	28	4.3	11.1	9.6
Elk Cabin	2/24	5	1.0	2.8	3.1
Hopewell	2/24	24	4.7	15.2	---
La Cueva	2/25	18	4.4	3.0	---
Palo	2/22	18	3.2	9.2	---
Payrole	3/01	15	3.8	7.6	7.8
Quemazon	2/25	22	4.9	4.9	7.8
Rio En Medio	2/28	29	5.9	7.4	8.0
Sandoval	2/28	14	3.6	2.7	4.5
Senorita Divide	2/25	21	4.6	5.0	---
Taos Canyon	2/22	12	2.9	7.7	3.8
Tres Ritos	2/28	17	2.7	7.4	4.6
North Costilla	2/25	22	3.2	---	---
Powderhouse	2/24	12	2.0	---	---
Rio Hondo					
Taos Powderhorn	2/24	38	12.0	22.9	---
Red River					
Hematite Park (B)	2/23	10	2.3	6.4	3.5
Red River	2/23	9	2.5	7.5	5.0
Red River #2	2/23	15	3.5	9.0	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of MARCH 1, 1977

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/24	12	2.6	15.3	10.0
Lemon	2/28	11	2.4	12.5	---
Mineral Creek	2/24	21	3.1	15.9	12.9
Molas Lake	2/24	13	2.8	12.8	11.2
Purgatory	2/28	19	4.6	19.1	---
Red Mt. Pass (B)	2/24	43	7.3	25.8	25.4
Silverton Sub-Sta.	2/24	7	1.0	10.2	6.7
Spud Mountain	2/24	17	4.4	22.9	19.7
Dolores River					
Lizard Head	2/28	17	3.2	14.1	13.9
Lone Cone	2/25	26	4.2	17.1	---
Ophir Loop	2/24	28	5.2	10.1	---
Rico	2/28	5	0.8	6.7	7.2
Telluride	2/24	14	2.9	9.0	6.7
Trout Lake	2/24	25	4.2	12.3	11.8
San Juan River					
Chama Divide (B)	2/23	3	0.6	5.3	3.0
Chamita (B)	2/25	18	2.6	9.2	7.3
Upper San Juan	2/28	31	7.2	29.8	24.5
Wolf Cr. Pass (B)	2/24	28	5.8	26.6	22.0
Wolf Cr. Summit	2/24	24	5.2	25.0	22.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/28	26	6.1	17.6	17.4
Blue Mesa	2/28	19	3.3	7.8	6.9
Butte	2/23	24	4.5	12.0	---
Cochetopa Pass (B)	2/23	8	1.6	4.9	4.8
Crested Butte	2/23	26	4.8	13.8	10.3
Keystone	2/24	30	5.8	15.9	16.7
Lake City	2/22	9	1.3	6.1	7.0
Mesa Lakes (B)	2/25	26	4.0	12.4	13.5
McClure Pass	2/23	24	4.0	15.1	14.7
Park Cone	2/22	12	1.9	9.6	8.8
Park Reservoir	2/24	31	5.7	21.7	19.5
Porphyry Creek	2/28	29	5.8	11.0	13.7
Tomichi	2/28	29	5.8	8.2	10.5
Surface Creek					
Alexander Lake	2/28	26	6.1	17.6	17.4
Mesa Lakes	2/25	26	4.0	12.4	13.5
Park Reservoir	2/24	31	5.7	21.7	19.5
Uncompahgre River					
Ironton Park	2/28	29	6.7	13.0	11.3
Red Mountain Pass	2/24	43	7.3	25.8	25.4
Telluride (B)	2/24	14	2.9	9.0	6.7
COLORADO BASIN					
Blue River					
Blue River	2/24	19	3.5	7.5	7.4
Fremont Pass	2/23	31	6.2	14.4	12.9
Frisco Pass	2/25	0	0.0	6.9	6.4
Grizzly Peak	2/25	35	8.7	12.7	14.6
Hoosier Pass (B)	2/24	21	4.7	10.2	10.6
Shrine Pass	2/23	33	6.9	12.9	14.5
Snake River	2/25	16	3.1	6.3	7.0
Summit Ranch	2/23	16	3.1	5.2	7.0

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 58-72
<u>Colorado River</u>					
Arrow	2/24	25	4.2	10.4	10.5
Berthoud Pass	2/25	32	6.0	10.8	12.8
Berthoud Summit	2/25	36	9.2	13.1	15.4
Cooper Hill	2/28	26	3.1	10.2	9.0
Fiddler Gulch	NS	---	---	---	14.0
Glenmar Ranch	2/24	17	3.4	6.9	7.0
Gore Pass	2/23	18	3.2	9.3	8.6
Grand Lake	2/23	22	2.9	7.1	7.0
Lake Irene	2/23	32	5.8	17.2	19.0
Lapland	2/23	16	2.7	7.3	9.0
Lulu	2/28	37	7.6	15.2	14.9
Lynx Pass	2/23	22	4.1	10.5	10.5
McKenzie Gulch	2/28	12	2.2	5.8	5.5
Middle Fork	2/24	20	3.8	6.7	8.1
Milner	2/23	22	3.8	10.4	---
North Inlet	2/24	15	2.9	6.6	7.6
Pando	2/25	15	2.2	7.4	8.2
Phantom Valley	2/23	18	3.4	8.1	9.3
Ranch Creek	2/24	16	2.8	7.1	7.8
Tennessee Pass (B)	3/01	22	3.1	8.7	8.7
Vasquez	2/25	27	4.6	9.6	10.2
<u>Roaring Fork</u>					
Aspen	2/25	30	5.8	16.0	14.0
Independence Pass	2/27	33	7.6	13.8	13.9
Ivanhoe	2/24	30	6.7	14.3	13.9
Kiln	2/24	22	4.0	10.5	---
Lift	2/25	30	5.0	14.5	13.6
McClure Pass	2/23	24	4.0	15.1	14.7
Nast	2/25	11	2.4	6.4	5.5
North Lost Trail	2/23	17	2.8	13.3	13.3
<u>Williams Fork River</u>					
Glenmar Ranch	2/24	18	3.4	6.9	7.0
Jones Pass	2/28	33	6.0	10.9	11.9
Middle Fork	2/24	20	3.8	6.7	8.1
<u>Willow Creek</u>					
Granby	2/24	13	2.0	7.1	6.5
Willow Cr. Pass	2/28	21	3.8	10.3	10.4
<u>Plateau Creek</u>					
Mesa Lakes	2/25	26	4.0	12.4	13.5
Park Reservoir	2/24	31	5.7	21.7	19.5
Trickle Divide	2/24	33	6.0	22.9	21.0
YAMPA BASIN					
<u>Elk River</u>					
Elk River	2/28	45	7.4	14.7	15.9
Hahn's Peak	2/28	33	6.0	12.8	---
<u>White River</u>					
Burro Mountain	2/23	30	5.0	13.8	15.0
Rio Blanco	2/24	23	4.3	10.8	13.1
<u>Yampa River</u>					
Bear River	2/23	20	3.2	8.8	---
Columbine (B)	2/28	53	10.9	17.8	20.4
Crosho	NS	---	---	---	---
Dry Lake	2/24	41	7.6	12.8	17.8
Lynx Pass (B)	2/23	22	4.1	10.5	10.5
Rabbit Ears	2/28	47	9.5	16.8	21.8
Tower	2/24	84	16.6	33.6	---
Yampa View	2/28	29	6.3	11.2	13.3

NOTE: NS - No Survey
(B) - On Adjacent Drainage

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

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